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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,473	05/25/2005	Heinrich Englander	LYBZ 2 00094	5168
27885	7590	03/18/2008		
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CLEVELAND, OH 44114				
EXAMINER				
PILKINGTON, JAMES				
ART UNIT		PAPER NUMBER		
3682				
MAIL DATE		DELIVERY MODE		
03/18/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/536,473

Applicant(s)

ENGLANDER ET AL.

Examiner

JAMES PILKINGTON

Art Unit

3682

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-36 is/are pending in the application.
- 4a) Of the above claim(s) 20, 21 and 28-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 19, 22-27 and 34-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 20, 21 and 28-33 are withdrawn from consideration in accordance with Applicant's prior election dated 6/29/2007.

The status of the claims to be examined is as follows: Claims 18-27 and 34-36.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 22, line 2 the word "id" should be - - cover - -.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 18 and 34 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "relatively narrow gap" in claim 18 is a relative term which renders the claim indefinite. The term "relatively narrow gap" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. How narrow is a "relatively narrow gap"?

Re clm 34, it is not clear to the examiner what type of material the Applicant is attempting to claim. A material that increases friction would increase the likelihood that the bearing would seize. What type of material increases friction but reduces the chances of seizing?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 18, 19, 22 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Obara, USP 6,176,620.

Obara discloses a ball bearing (Figure 1) having a stationary/inner race and a rotating/outer race (race 1 made of elements 2/4/6 and race 2 made of element 1), an emergency bearing defined by: emergency bearing surfaces (face of 4 and face of race 1 in Figure 1) which are concentric to the rotation axis (dashed line in Figure 1), the emergency bearing surfaces being disposed opposite each other during normal operation with a relatively narrow gap therebetween (g), the concentric emergency bearing surfaces (face of 4 and face of race 1) also extend axially (along the rotational axis) and a bearing cover defined by projections (4) on which the emergency bearing surfaces are carried.

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7. Claims 18, 19, 22 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Geffroy, FR1464889 (submitted by Applicant).

Geffroy discloses a ball bearing (Figure 9) having a stationary/inner race and a rotating/outer race (1d and 2d), an emergency bearing defined by: emergency bearing surfaces (either side of gap j4) which are concentric to the rotation axis, the emergency bearing surfaces being disposed opposite each other during normal operation with a relatively narrow gap therebetween (j4), the concentric emergency bearing surfaces (facing surfaces around j4) also extend axially and a bearing cover defined by projections (at 2d) on which the emergency bearing surfaces are carried.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obara '620 as applied to claim 1.

Obara does not disclose that the gap is less than 0.1 mm or less than 0.05 mm.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the gap less than 0.1mm or 0.05mm, since it has been held that discovering an optimum value of a resulting effective

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variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

10. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obara '620 as applied to claim 1.

Obara further discloses that components of the bearing are made of metal.

Obara does not disclose that the material is steel or hardened roller bearing steel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use steel or hardened roller bearing steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

11. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Obara' 620 as applied to claim 1 in view of Alexander et al, USP 3,445,146.

Obara does not disclose that at least one of the two emergency bearing surfaces is coated.

Alexander teaches a ball bearing with emergency bearing surfaces (either side of gap B) that are coated (23 is a coating of material).

It would have been obvious to one of ordinary skill in the art to use a material coating in Obara to keep the emergency bearing surfaces from coming

into direct contact with each other during normal operation as taught by Alexander. Using the known technique of a material coating in Obara would have been obvious to one of ordinary skill in the art.

12. Claims 36 is rejected under 35 U.S.C. 103(b) as being unpatentable over Obara, USP 6,176,620.

Obara discloses a ball bearing (Figure 1) having a stationary/inner race and a rotating/outer race (race 1 made of elements 2/4/6 and race 2 made of element 1), a plurality of balls (3), an emergency bearing including: a pair of annular emergency bearing surfaces (face of 4 and face of race 1 in Figure 1), the bearing surfaces having a gap therebetween, and wherein the surfaces are made of a material applies a frictional drag and avoids seizing (any material, in the absences of claim particular material properties is capable of performing such a feature).

Obara does not disclose that the gap is less than 0.1 mm.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the gap less than 0.1mm, since it has been held that discovering an optimum value of a resulting effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Response to Arguments

13. The Applicant argues on page 8 that since, as claimed, the emergency bearing surfaces assume mounting and guidance functions only during a one-

time emergency run until the component is brought to a standstill renders the claim allowable.

According to MPEP 2114 an apparatus must be distinguished from the prior art in terms of structure rather than function. The fact that the emergency bearing surfaces act as mounting and guidance surfaces does not structural differentiate the claim over the prior art references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. P./
Examiner, Art Unit 3682
3/10/08

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3682